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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,367	08/05/2003	Thomas Senn	97634.00175	6916

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MCCARTER & ENGLISH, LLP STAMFORD OFFICE  
FINANCIAL CENTRE, SUITE 304A  
695 EAST MAIN STREET  
STAMFORD, CT 06901-2138

EXAMINER
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HANG, VU B

ART UNIT	PAPER NUMBER
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2625

MAIL DATE	DELIVERY MODE
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01/28/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/634,367

Applicant(s)

SENN, THOMAS

Examiner

Vu B. Hang

Art Unit

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 08/05/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

- This office action is responsive to the communication filed on 11/14/2007.
- The amendments received on 11/14/2007 have been entered and made of record.
- Claims 1-21 are pending in the application.

### ***Response to Arguments***

1. Applicant's arguments filed 11/14/2007, with respect to the claim objection of Claim 1, have been fully considered but they are not persuasive. It appears that the applicant is claiming a printing process that is an improvement to the printing processes that are known in the art. With the preposition "In" included to the preamble, the applicant is not claiming a printing process but instead claiming the "improvement". An improvement is considered a state of being, not a process or method. A proper format in this case, for example, would be similar to "A printing process having xyz, the printing process comprising the steps of: a, b and c". The examiner recommends appropriate correction for this matter. Claim 1 stands objected.
2. Applicant's arguments with respect to Claims 4 and 20 under 35 U.S.C. § 112, have been fully considered and are persuasive. Therefore, the previous rejections of Claims 4 and 20 under 35 U.S.C. § 112 have been withdrawn.
3. Applicant's arguments with respect to Claims 1 and 21 and the cited prior art Weichmann et al. (US Patent 6,580,524 B1), have been fully considered and are persuasive. Therefore, the previous rejections of Claims 1-21 have been withdrawn. However, upon further consideration, a new ground of rejection is made in view of Hatta et al. (US Pub. 2005/0117948 A1).

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4, 6 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al. (US Patent 6,580,524 B1) in view of Hatta et al. (US Pub. 2005/0117948 A1).

1. Regarding **Claims 21 and 1**, Weichmann discloses a printing process involving two stages, a pre-printing stage and an edition printing stage which comprises in the pre-printing stage producing digital original image data which represent an original master (see Fig.4 (1,3,70) and Col.4, Line 17-30);

producing the digital printing data from the master image for the printing colors involved in the printing (see Col.4, Line 17-30);

transmitting the digital printing data to a print shop by way of a data channel (see Fig.4, Col.8, Line 6-23 and Col.8, Line 24-33);

producing the printing plates in the print shop using the digital printing data for use in the edition printing to be carried out in a printing machine (see Col.5, Line 54-54);

using for the color control of the printing machine test image data corresponding to the test image produced by an image wise colorimetric measurement of at least one edition printing sample using a spectral color measurement system (see Col.4, Line 17-30 and Col.4, Line 43-57);

transmitting the results of the quality monitoring from the pre-printing stage to the print shop through a data channel (see Col.7, Line 6-14, Col.8, Line 6-23 and Col.8, Line 24-33); and

using the in the printing shop the results of the quality monitoring transmitted from the pre-printing stage for at least one of the release of the edition printing and the control of the printing process (see Col.7, Line 6-14, Col.8, Line 6-23 and Col.8, Line 24-33).

Weichmann fails to disclose transmitting the test image data thus produced in the print shop to the pre-printing stage through a data channel; and evaluating the test image data in the pre-printing stage for quality monitoring. Weichmann, however, teaches use of test forms for quality monitoring and controlling the printing process (see Col.4, Line 37-57). Weichmann further teaches communicating processing information and information about the image data to the pre-printing stage (see Fig.4 and Col.8, Line 6-23). Hatta discloses transmitting test image data to the pre-printing stage through a data channel (see Fig.19 (3A,330,336,338,335) and paragraphs [0220-0223]) and evaluating the test image data in the pre-printing stage (see Fig.19 (330,335) and paragraph [0023]).

Weichmann and Hatta are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art to include to the printing process a means for transmitting the test image data thus produced in the print shop to the pre-printing stage through a data channel; and evaluating the test image data in the pre-printing stage for quality monitoring. The motivation would be to perform quality assurance monitoring on the printing process and the print products. The test image sent to the pre-printing stage would enable appropriate adjustments and corrections on the image data and printing process.

2. Regarding **Claim 2**, Weichmann further discloses determining and then transmitting in the pre-printing stage measurement positions and nominal color values at these measurement positions through a data channel to the print shop (see Col.4, Line 43-57, Col.7, Line 6-14 and Col.8, Line 6-23), and using the nominal color values in the print shop for color control of the printing machine (see Col.7, Line 6-14).
3. Regarding **Claim 3**, Weichmann further discloses using a spectrally operating color measurement system for the image wise colorimetric measurement of the edition printing sample (see Col.4, Line 43-57), and wherein the test image data the pre-printing stage are spectral data which include for each measured point remission values for several different wavelength (see Col.4, Line 58 – Col.5, Line 3).
4. Regarding **Claim 4**, Weichmann and Hatta teach the printing process of Claim 3 but fail to disclose that the test image data transmitted to the pre-printing stage are spectral data which include for each measured image point, remission values for 16 wavelengths in the range of 400 to 700nm with respective spacing of 20nm. At the time of the invention, it would have been obvious for one skilled in the art to use test image data containing specific remission values. The motivation would be for design choice reasons. A designer may determine the level of accuracy needed for the quality monitoring, and use the test image data with the appropriate remission values.
5. Regarding **Claim 6**, Weichmann further discloses the monitoring of color deviations between nominal color values and the corresponding color measurement values contained in the test image data (see Col.5, Line 61-64, Col.6, Line 41-47 and Col.7, Line 6-14).

6. Regarding **Claim 9**, Weichmann further discloses transmitting the release for the edition printing to the print shop based on the quality monitoring conducted in the pre-printing stage (see Col.7, Line 6-14).
7. Regarding **Claim 10**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or modified nominal color values to the print shop (see Col.7, Line 6-14).
8. Regarding **Claim 11**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or concentration values for the colors involved in the printing to the print shop (see Col.7, Line 6-14).
9. Regarding **Claim 12**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or formulations for the colors involved in the printing to the print shop (see Col.7, Line 6-14).
10. Regarding **Claim 13**, Weichmann further discloses transmitting the results of the quality monitoring conducted in the pre-printing stage based on desired color change or modified digital printing data to the print shop for use in the production of new printing plates in the print shop based on the digital print data (see Col.5, Line 45-54 and Col.7, Line 6-14), and using the printing plates for the edition printing (see Col.5, Line 45-54 and Col.7, Line 6-14).
11. Regarding **Claim 14**, Weichmann further discloses protocolling the print quality of the edition printing (see Col.8, line 24-33).

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 5 and 15-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al. (US Patent 6,580,524 B1) in view of Hatta et al. (US Pub. 2005/0117948 A1), and in further view of Lavery et al. (US Patent 6,429,947 B1).

14. Regarding **Claim 5**, Weichmann discloses calculating a test image on the basis of a test image data transferred to the pre-printing stage (see Col.7, Line 6-14), but Weichmann and Hatta fail to disclose visually displaying the test image with a reference image on a screen for quality monitoring. Weichmann, however, teaches proofing the image data for quality assurance purposes (see Col.2, Line 26-33). Lavery teaches providing a display preview of a print product for customer approval (see Fig.1 and Col.2, Line 50-52) and passing a proof to a customer for approval (see Fig.1 and Col.6, Line 20-35).

15. Weichmann, Hatta and Lavery are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for visually displaying the test image with a reference image on a screen for quality monitoring. The motivation would be to provide a visual proofing means for ensuring customer satisfaction. The visual display of the test image with a reference image on a display screen would enable a customer the opportunity to approve the processed image data for printing.



16. Regarding **Claim 15**, the rationale provided for the rejection of Claim 5 is incorporated herein.
17. Regarding **Claim 16**, the rationale provided for the rejection of Claim 5 is incorporated herein.
18. Regarding **Claim 17**, the rationale provided for the rejection of Claim 5 is incorporated herein.
19. Regarding **Claim 18**, the rationale provided for the rejection of Claim 5 is incorporated herein.
20. Regarding **Claim 19**, Weichmann discloses image-wise measuring in the pre-printing stage the test print binding for quality evaluation using the spectral color measurement system (see Col.4, Line 43-57) but Weichmann and Hatta fail to disclose producing a screen display of the test print from the image data obtained, thereby using the screen display as a reference image for comparison with the test image. Weichmann, however, teaches proofing the image data for quality assurance purposes (see Col.2, Line 26-33). Lavery teaches providing a display preview of a print product for customer approval (see Fig.1 and Col.2, Line 50-52) and passing a proof to a customer for approval (see Fig.1 and Col.6, Line 20-35).
21. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for producing a screen display of the test print from the image data obtained, thereby using the screen display as a reference image for comparison with the test image. The motivation would be to provide a visual proofing means for ensuring print satisfaction. The screen display displaying the test prints, would enable a print operator or customer the opportunity to visually monitor and approve the processed image data for printing.

22. Regarding **Claim 20**, Weichmann discloses the printing process of Claim 1 but Weichmann and Hatta fail to expressly disclose the color measurement system is equipped with a goniometric measurement means, which allows illumination in different directions for the image capture. Weichmann, however, discloses a color measurement system that measures different area coverages and positions of the colors from the image capture (see Col.4, Line 43-57), and performing densitometric measurements for the colors in the image capture (see Col.4, Line 58 – Col.5, Line 3). At the time of the invention, it would have been obvious for one skilled in the art to include to the color measurement system a goniometric measurement means that allows illumination in different directions for the image capture. The motivation would be to perform the spectral data and densitometric measurements for the obtained image data to produce the test color image data. The spectral data and the density data of the captured image data are obtained through measuring the different angles of the colors in the image data, for which goniometric measurements can be applied.

23. Claims 7-8 rejected under 35 U.S.C. 103(a) as being unpatentable over Weichmann et al. (US Patent 6,580,524 B1) in view of Hatta et al. (US Pub. 2005/0117948 A1), and in further view of Rasmussen et al. (US Patent 6,912,071 B1).

24. Regarding **Claim 7**, Weichmann discloses produces digital test print data from test image data transferred to the pre-printing stage (see Col.4, Line 17-30, Col.8, Line 13-17 and Col.8, Line 24-33) but Weichmann and Hatta fail to disclose producing a physical test print by way of the digital test print data, wherein the quality monitoring includes a visual comparison the test print with a reference image. Weichmann, however, teaches proofing the image data for quality assurance purposes (see Col.2, Line 26-33). Rasmussen discloses producing a physical test print

by way of the digital test print data for visually monitoring the image quality of a print product (see Fig.6 and Col.9, Line 15-21).

25. Weichmann, Hatta and Rasmussen are combinable because they are from the same field of endeavor, namely print processing systems. At the time of the invention, it would have been obvious for one skilled in the art include to the printing process of Claim 1 a means for producing a physical test print by way of the digital test print data and visually comparing the test print with a reference image. The motivation would be to provide a visual proofing means for ensuring print satisfaction. The printed physical test prints, along with a reference image would enable a print operator or customer the opportunity to visually monitor and approve the processed image data for printing.

26. Regarding **Claim 8**, Weichmann further discloses the reference image is a test print produced in the pre-printing stage using the digital print data (see Fig.6 and Col.9, Line 15-21).

### *Conclusion*

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu B. Hang whose telephone number is (571) 272-0582. The examiner can normally be reached on Monday-Friday, 9:00am - 6:00pm.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler L. Lamb can be reached on (571) 272-7406. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

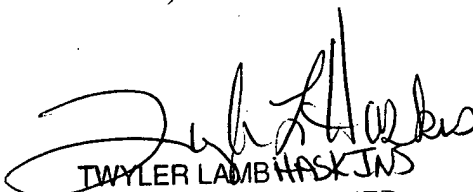
Application/Control Number:  
10/634,367  
Art Unit: 2625

Page 11

29. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vu Hang  
Assistant Examiner

*Vu Hang*

  
TYLER LAMB HASKINS  
SUPERVISORY PATENT EXAMINER